



DAF drives largest mobile concrete pump

A MELBOURNE firm has introduced the largest mobile concrete pump in the Southern Hemisphere, featuring a 55-metre boom capable of pouring 150 cubic metres an hour.

Mounted on a modified DAF CF85 rigid truck, the rig is regarded as a real feat of engineering – the result of a collaboration between DAF as well as Melbourne concrete pump distributor, RMN, and DAF dealer, Hallam Truck Centre.

Local Engineering

Given the size and weight of the package, the truck underwent significant customisation and re-engineering to be road registered by VicRoads. Originally a standard 8x4, DAF built a robust front-end, while in Victoria, Hallam Truck Centre's Leon Howell worked with RMN's engineers to develop the correct wheel base to accommodate the size of the boom and a third, rear lazy axle to support the extra weight.

In addition RMN handled other engineering specifications and Government permits and also fitted the Sermac concrete boom.

The result is a unique vehicle that represents a number of firsts for both DAF and the industry. In addition to carrying the largest concrete boom downunder, the vehicle has been transformed into a 10x4 – the first tan-

dem DAF in Australia to incorporate a rear lazy axle.

The vehicle is a FAD CF85, twin-steer, 10x4 rigid and due to the unique design and componentry, can achieve a GVM of 43 tonne. It is powered by a 12.6-litre, 24 valve, 6-cylinder, turbo charged, intercooled engine, producing 315 kW (430 hp) at 1900 rpm and 1950 Nm (1440 lb/ft) of flat torque at 1000 - 1500 rpm for optimum fuel economy and performance. The DAF CF85 incorporates a 16-speed ZF synchro transmission with a high-horsepower, split-shift power take-off unit that drives the concrete pump.

Airglide Suspension

In addition, the truck includes a DAF 186N front axle (with a combined ground rating of 18 tonnes), Meritor RT46-160 rear axles (rated to 20,900kg) with power divider and cross locks for off-road concreting applications, a Rockwell lazy axle (rated at 10 tonnes), and each axle rides on PACCAR's Airglide 200 eight-bag air suspension (rated to 18,100kg).

Sitting atop the vehicle is a Sermac 5RZ53 concrete boom pump. It comprises five retractable booms which fold down on top of one another into a compact Z-configuration.

ICPS (Vic) – the customer, has been operat-

ing the vehicle for just a month and is more than happy with the package. So much so that it has ordered another DAF-mounted concrete pump with a 55-metre boom.

Formerly known as Geelong Concrete Pumping, ICPS (Vic) maintains a fleet of 16 mobile concrete pumps which service Melbourne CBD and the surrounding suburbs as well as the western region of Victoria to Geelong. The company has worked on a number of high-profile construction projects, including a three-year refurbishment of the MCG's southern stand. It is currently involved in several major road works, including the Geelong and Bendigo bypasses, and the 34-km EastLink freeway, as well as various residential and commercial high-rises.

Over the past year, ICPS (Vic) has been updating and expanding its fleet with new DAFs. It currently has three CF85 trucks equipped with a 37-metre, a 41-metre and, the latest, a 55-metre, folding boom.

According to Managing Director Paul Willard, the DAF-mounted concrete pumps are ideal for major construction projects, such as high-rises, factories and shopping centres which have large concrete pours. He says that ordinarily construction companies fill these pours by running long

concrete hoses from smaller booms. With his latest truck, for example, the boom can reach an 18-storey building.

30% Saving

“That’s the distinct advantage we have with our new DAFs. The big-

ger the boom, the less hoses people have to drag around on-site. Our extended boom allows us to set up easily and pour concrete quickly and safely. And that all impacts on the bottom line. These new DAF concrete pumps are saving up to 30 per cent in costs,” he explained.

Apart from the significant cost savings, Paul says the extended booms also benefit occupational health and safety “When concrete can be poured directly from a boom, it’s less wear and tear on the equipment and the men, meaning less injuries from manual handling hoses.”

In addition to office blocks, Paul says the DAF concrete pumps are also ideal for major road-works.

Instead of blocking off a lane of traffic, the booms can reach across entire lanes to concrete major thoroughfares. They can also reach high bridge interchanges with two overpasses on top of one another.

“The whole concreting process is extremely simple – from set up to operation,” he said.

